

XYZ Technologies is more than a service company. It is a dynamic system driven by projects that attract talents and specialists from all disciplines and generations, across our three offices in Montreal, Merida in Mexico, and Dubai. Our locations are places of research-creation that allow us to explore and develop unconventional solutions with a high degree of technological complexity. These projects are designed and produced in Canada and installed in the United States, Mexico, the Caribbean, South America, Europe, Asia, and the Middle East.

XYZ has several significant achievements for prestigious clients. The Rio Tinto Alcan Planetarium, the Montreal Casino, the Canadian Olympic House, the Videotron Center, the Meeras City Walk in Dubai, the Pointe-à-Callière Museum, the Théâtre du Nouveau Monde, the UNESCO Global Geopark in Percé, the Lodha real estate group in India, and the Great Mayan World Museum in Merida are just a few examples.

Working at XYZ means enjoying a rooftop terrace with a breathtaking view of the downtown area, happy hours, a self-service BBQ, group insurance, and a keg of kombucha available. It also means being part of a dynamic team that wants to exceed its limits every day and make its work environment a stimulating place.

## **Job Summary**

• Start Date: As soon as possible

Number of Positions: 1Salary: To be discussed

Work Schedule: 40 hours - Full timeemployment Status: Permanent

Shift: Day

As an electrical engineer specializing in lighting, your role is to design technical aspects, develop and implement lighting systems that meet our clients' needs. Here is a description of typical tasks:

- Design lighting systems: As an electrical engineer specializing in lighting, you will be responsible for designing lighting system infrastructures for buildings, public spaces, and infrastructure. You will work closely with architects, civil engineers, and other third-party professionals to create lighting plans that meet our clients' needs.
- Develop installation plans: You will develop detailed installation plans for lighting systems using computer-aided design (CAD) software. You will work closely with third-party electrical contractors to ensure that the installation is done in compliance with standards and codes.



- Make recommendations for energy efficiency improvement: You will be responsible for proposing solutions that improve the energy efficiency of lighting systems, motion sensors, and automatic light controls.
- Perform tests and inspections: You will need to perform tests and inspections on lighting systems to ensure they are working correctly and meet standards and codes. You will also need to perform safety tests to ensure that installations comply with safety standards.
- Provide advice and technical support: You will need to provide advice and technical support to internal and external clients, contractors, and other professionals involved in the project. You will need to answer their questions and provide them with solutions to potential problems.
- Assist in designing lighting control systems: You will assist the lighting control systems engineer in designing lighting control systems that regulate light intensity based on user needs and environmental conditions.
- Assist in programming control systems: You will assist the lighting control systems engineer in programming lighting control systems. You may be responsible for setting up the user interface, control settings, and configuring sensors and actuators.
- Assist in installing control systems: You may be responsible for assisting in installing lighting control systems, working with electricians and lighting technicians. You may be responsible for commissioning and starting up lighting control systems.
- Perform tests and inspections: You may be responsible for performing tests and inspections on lighting control systems to ensure they are working correctly and comply with applicable standards and codes.
- Conduct research and propose improvements: You may need to conduct research to develop innovative solutions that improve lighting system performance and efficiency. You will need to propose these improvements to clients and management for consideration.

In summary, electrical engineer specializing in lighting, your role is to design, develop, and implement efficient and safe lighting systems that meet the needs of our clients. You will work closely with other professionals to ensure that projects are completed within the allotted time and budget.



## **Required Knowledge**

- 1. Electrical engineering knowledge: You must have a basic understanding of electrical concepts such as voltage, current, power, resistance, wiring calculations, etc. You should be able to understand electrical diagrams and wiring plans to assist in the design and installation of lighting control systems.
- 2. Programming and protocols knowledge: You must have basic programming skills, especially in common programming languages used for control systems, as well as knowledge of different control protocols such as DMX, 0-10v, SPI, ArtNet, and other proprietary protocols. Understanding of RS485 RS232 UDP/TCP protocols is required.
- 3. Computer-aided design (CAD) software knowledge: You must have basic CAD skills to assist in the design and implementation of lighting control systems.
- 4. Project management knowledge: You must be able to assist the lighting control systems engineer in project management, including planning, coordination, and communication with stakeholders.
- 5. Other complementary knowledge:
- Basics of structured cabling systems;
- Load and electrical distribution calculations, understanding of AC and DC voltage;
- Design of electrical cabinets;
- ULC CSA standards;
- Industrial control systems;
- Sensors:
- Basic understanding of networks and UDP/TCP network protocol
- Electronic knowledge